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10/786,537	02/26/2004	Jeroen Wigard	59643.00365	3246
32294 7590 11/12/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212				
EXAMINER				
HERRERA, DIEGO D				
ART UNIT		PAPER NUMBER		
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11/12/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,537

Applicant(s)

WIGARD ET AL.

Examiner

DIEGO HERRERA

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 19-29, 32, 33, 40 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 30, 31 and 34-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/26/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: the word equalize is misspelled.

Appropriate correction is required.

The disclosure is objected to because of the following informalities: in ¶: 63, the forward slash between "and" & "or" is missing.

Appropriate correction is required.

Claim Objections

Claim 36 is objected to because of the following informalities: misspelled word establish. Appropriate correction is required.

Claims 1, 6-13, 18, 30, and 36-39 are objected to because of the following informalities: "if" statements change to "when" because there is no alternative step being claimed as to something else taking place when the "if" statement does not take place. Appropriate correction is required.

Drawings

Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

Election/Restrictions

Applicant's election with traverse of claims 19-29, 32, 33, 40, and 41 in the reply filed on 8/8/2008 is acknowledged. The traversal is on the ground(s) that a final office action was issued referring to §811 of the MPEP, 37 CFR 1.142 (a), and that the examiner examined previous claims and applied recited references. This is not found persuasive because due to the process of the pre-appeal the final office rejection was withdrawn and prosecution reopened, furthermore, in light of Cheung and Harris it is noted that they are two different references used from two different areas hence the restriction and election, since the examiner has the undue burden to search different classes and subclasses dealing with the different sets of claims.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18 are rejected under 35 U.S.C. 101 because these claims do not fall into one of the statutory categories of invention recited in 35 USC § 101, see also MPEP § 2106.IV.B, there is no indication or statement stating what particular apparatus or transform underlying subject matter to a different state or thing is performing,

determining, providing, changing, checking, setting, and representing, hence, the claims are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 37 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the claim now recites a "computer readable medium" however there is no mention of this in the instant specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15, 17-18, and 30,31, 34-39 are rejected under 35 U.S.C. 102 (b) as being anticipated by Harris et al. (US 20020146024 A1).

Regarding claim 1. A method (abstract, title, ¶: 8-9, 17-21, Harris et al. teaches a method for data rate control in a telecommunication network) comprising:
determining if a first radio link or a second link of a plurality of links is limiting capacity of

a connection (¶¶: 17-21, Harris et al. teaches determining means for determining throughput capacity through infrastructure) comprising the first radio link and the second link (¶¶: 17, Harris et al. teaches multiple lines or links participating in the data transmission); and

changing at least one parameter relating to at least one of said first and said second links to change the capacity of said first link or said second link if said at least one of said first and said second links is limiting capacity of the connection, whereby the average power per bit in said radio link is changed (¶¶: 17-21, Harris et al. teaches changing data rate whether it be high or low determined by determination means in the infrastructure transmission of data throughput, hence, changing data rate to change the overall capacity of the system and communication throughput).

Regarding claim 18. A method (abstract, title, ¶¶: 8-9, 17-21, Harris et al. teaches a method for data rate control in a telecommunication network) comprising:
determining if a first radio link or a second link is limiting capacity of a connection (¶¶: 17-21, Harris et al. teaches determining means for determining throughput capacity through infrastructure) comprising the first radio link and the second link (¶¶: 17, Harris et al. teaches multiple lines or links participating in the data transmission); and
changing at least one parameter relating to at least one of said first and said second links whereby the other of said first and said second links is used to improve the quality of said connection if said one of said first and said second links is limiting capacity, and whereby the average power per bit in said radio link is changed (¶¶: 17-21, Harris et al. teaches changing data rate whether it be high or low determined by determination

means in the infrastructure transmission of data throughput, hence, changing data rate to change the overall capacity of the system and communication throughput).

Regarding claim 30. A controller (¶: 7-9, 17-21, Harris et al. teaches a SDU unit for a controller), comprising:

a determining unit configured to determine if a first radio link or a second link is limiting capacity of a connection comprising the first radio link and the second link (¶: 17-21, Harris et al. teaches determining means for determining throughput capacity through infrastructure); and

a unit configured to cause at least one parameter relating to at least one of said first and said second links to be changed (¶: 17-21, Harris et al. teaches multiple lines or links participating in the data transmission), thereby changing the capacity of said at least one of said first and said second links (¶: 7-9, 17-21, Harris et al. teaches determining means for capacity limitations and changing bit rate to increase transmission communication system), if said first link or said second link is limiting capacity in the connection, whereby the average power per bit in said radio link is changed (¶: 17-21, 37, 56-60, Harris et al. teaches changing data rate whether it be high or low determined by determination means in the infrastructure transmission of data throughput, hence, changing data rate to change the overall capacity of the system and communication throughput).

Regarding claim 36. A system (abstract, fig. 1-4, Harris et al. teaches system), comprising:

a first entity (fig. 1, 2, Harris et al. teaches several entities in a system for communication wireless and wired); a second entity (fig. 1, 2, Harris et al. teaches several entities in a system for communication wireless and wired); a third entity (fig. 1, 2, Harris et al. teaches several entities in a system for communication wireless and wired), wherein a connection is established between said first, second and third entities with a first link provided between the first entity and the second entity and a second link provided between said second entity and said third entity (fig. 1, 2, ¶: 1-21, 37-40, 56-60, Harris et al. teaches several entities in a system for communication wireless and wired, connections among the entities is wireless or wired); and

a controller for controlling the connection comprising the first link and the second link (¶: 7-9, Harries et al. teaches a SDU unit controlling bit rate and), the controller including a determining unit configured to determine if said first link or said second link is limiting capacity of said connection (¶: 7-9, 17-21, Harris et al. teaches a SDU unit for a controller); and

changing at least one parameter for relating to at least one of said first and said second links to change the capacity of said first link or said second link if the one of said first and said second links is limiting capacity in the connection (¶: 7-9, 17-21, Harris et al. teaches determining means for capacity limitations and changing bit rate to increase transmission communication system).

Regarding claim 37. A computer program product embodied on a computer readable medium, the computer program product comprising software code portions, the software code portions, when executed, to effect determining if a first link or a second

link is limiting capacity of a connection comprising the first link and the second link (§¶: 17-21, Harris et al. teaches determining means for determining throughput capacity through infrastructure); and
changing at least one parameter relating to at least one of said first and said second links to change capacity of said first link or said second link if the one of said first and said second links is limiting capacity in the connection (§¶: 7-9, 17-21, Harris et al. teaches determining means for capacity limitations and changing bit rate to increase transmission communication system).

Regarding claim 38. An apparatus (§¶: 7-9, 17-21, 37-39, Harris et al. teaches a unit device), comprising:

determining means for determining if a first radio link or second link is limiting capacity of a connection comprising the first radio link and the second link (§¶: 17-21, Harris et al. teaches determining means for determining throughput capacity through infrastructure);
and

causing means for causing at least one parameter relating to at least one of said first and said second links to be changed (§¶: 17-21, 37, 56-60, Harris et al. teaches changing data rate whether it be high or low determined by determination means in the infrastructure transmission of data throughput, hence, changing data rate to change the overall capacity of the system and communication throughput), thereby changing the capacity of said at least one of said first and second links, if said first link or said second link is limiting capacity in the connection (§¶: 7-9, 17-21, Harris et al. teaches determining means for capacity limitations and changing bit rate to increase transmission

communication system), whereby the average power per bit in said radio link is changed (¶: 17-21, 37, 56-60, Harris et al. teaches changing data rate whether it be high or low determined by determination means in the infrastructure transmission of data throughput, hence, changing data rate to change the overall capacity of the system and communication throughput).

Regarding claim 39. An apparatus (¶: 7-9, 17-21, 37-39, Harris et al. teaches a unit device), comprising:

determining means for determining a first link or a second link is limiting capacity of a connection comprising the first link and the second link (¶: 7-9, 17-21, Harris et al. teaches determining means for capacity limitations and changing bit rate to increase transmission communication system); and

causing means for causing at least one parameter relating to at least one of said first and said second links to be changed if said first link or said second link is limiting capacity whereby another of said first and second links is used to improve the quality of said connection, whereby the average power per bit in said radio link is changed (¶: 17-21, 37, 56-60, Harris et al. teaches changing data rate whether it be high or low determined by determination means in the infrastructure transmission of data throughput, hence, changing data rate to change the overall capacity of the system and communication throughput).

Consider claim 2. The method as claimed in claim 1, wherein changing comprises changing the at least one parameter relating to said at least one of said first and said second links to increase the capacity of said first link or said second link (¶: 8-9, 17-21,

37, Harris et al. teaches algorithms and threshold are measured and determined to be bottlenecked and hence changes occur on data rate to improve quality of connection or link).

Consider claim 3. The method as claimed in claim 1, wherein changing comprises changing the at least one parameter relating to another of said first and said second links to improve quality of said connection (¶: 8-9, 17-21, 37, Harris et al. teaches algorithms and threshold are measured and determined to be bottlenecked and hence changes occur on data rate to improve quality of connection or link).

Consider claim 4. The method as claimed in claim 1, wherein changing comprises changing the at least one parameter that comprises at least one of bit rate, error rate, block error rate, bit error rate, activity factor at an interface with the at least one said first link or said second link, and scheduling of users with a given bit rate (¶: 8-9, 17-21, 37, Harris et al. teaches at least one of bit rate at least one link and assigning said bit rate to improve quality of connection or link).

Consider claim 5. The method as claimed in claim 4, wherein changing comprises decreasing said bit rate (¶:37, Harris et al. teaches changing algorithm of data rate in the spread-spectrum communications systems. The current rate is determined to be above the bottleneck link speed for the data transmission the data rate can be decreased).

Consider claim 6. The method as claimed in claim 4, wherein changing comprises increasing the error rate if said first link is limiting capacity (¶: 37-38, Harris et al. teaches increasing or decreasing data rate and also any other data type

rate to maintain or better the quality of communication).

Consider claim 7. The method as claimed in claim 4, wherein the changing comprises decreasing the error rate if the second link is limiting said bit rate (§¶: 17-21, 37-38, Harris et al. teaches increasing or decreasing data rate and also any other data type rate to maintain or better the quality of communication).

Consider claim 8. The method as claimed in claim 4, wherein changing comprises using a higher activity factor at an interface with said second link if said first link is limiting capacity (§¶: 17-21, 37-38, Harris et al. teaches increasing or decreasing data rate and also any other data type rate and parameters to maintain or better the quality of communication).

Consider claim 9. The method as claimed in claim 4, wherein changing comprises using a lower activity factor at an interface with said second link if said second link is limiting capacity (§¶: 17-21, 37-38, Harris et al. teaches increasing or decreasing data rate and also any other data type rate and parameters to maintain or better the quality of communication).

Consider claim 10. The method as claimed in claim 4, wherein changing comprises scheduling increased capacity to users with a relatively low power per bit if said first link is limiting capacity (§¶: 8-9, 17-21, 37-38, Harris et al. teaches algorithm acting as a scheduling logic using a bottleneck method to determined quality and other parameters are limiting or not).

Consider claim 11. The method as claimed in claim 4, wherein changing comprises scheduling increased capacity to users with a relatively high power per bit if said second

link is limiting capacity (§§: 8-9, 17-21, 37-38, Harris et al. teaches algorithm acting as a scheduling logic using a bottleneck method to determined quality and other parameters are limiting or not).

Consider claim 12. The method as claimed in claim 4, wherein changing comprises using fair throughput scheduling if the first link is limiting capacity (§§: 8-9, 17-21, 37-38, Harris et al. teaches algorithm acting as a scheduling logic using a bottleneck method to determined quality and other parameters are limiting or not).

Consider claim 13. The method as claimed in claim 4, wherein changing comprises using fair resource scheduling if said second link is limiting capacity (§§: 8-9, 17-21, 37-38, Harris et al. teaches algorithm acting as a scheduling logic using a resource allocation method to provide quality and other parameters when determining means have determined whether links are limiting or not).

Consider claim 14. The method as claimed in claim 4, wherein changing comprises changing the at least one parameter which has at least one limiting value (§§: 8-9, 17-21, 37-38, Harris et al. teaches algorithm acting as a scheduling logic using a resource allocation method to provide quality and other parameters when determining means have determined whether links are limiting or not).

Consider claim 15. The method as claimed in claim 14, wherein changing comprises changing the at least one parameter, and wherein said limiting value is one of an absolute value and amount of change in said at least one parameter (§§: 8-9, 17-21, 37-38, Harris et al. teaches algorithm acting as a scheduling logic using a resource allocation method to provide quality and other parameters when determining means

have determined whether links are limiting or not).

Consider claim 17. (Previously Presented) The method as claimed in claim 1, wherein determining comprises determining said second link comprises a transport link (¶: 59-60, Harris et al. teaches TCP and UDP protocols used in system with algorithms in mind in place).

Consider claim 34. (Previously Presented) The controller as claimed in claim 30, wherein said controller comprises software, said software providing one or more of the following:

means for determining, means for selecting, and means for causing (¶: 57-61, Harris et al. teaches processor enabled to execute logic for selecting, determining, and it is the means for causing computations and/or output data to other devices).

Consider claim 35. (Previously Presented) The controller as claimed in claim 30, wherein said controller is provided in a radio network controller (fig. 2, ¶: 20-21, Harris et al. teaches wireless infrastructure, hence, having RNC said controller most likely having the SDU unit).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEGO HERRERA whose telephone number is (571)272-0907. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diego Herrera/

Examiner, Art Unit 2617

/Lester Kincaid/

Supervisory Patent Examiner, Art Unit 2617